

## ENVIRONMENTAL ASSESSMENT

**Project Name:** Montana Power Co. - Salem **Proposed Implementation Date:** June 97

**Proponent:** Cascade County

**Type and Purpose of Action:** The proponent proposes to mine, crush, stockpile and transport 10,000 cubic yards of sand and gravel to be used on county roads. The proponent would salvage soils, mine sand and gravel, recontour, replace the topsoil and seed the site with a grass mixture.

**Location:** SW¼, Sec. 12, T21N, R5E **County:** Cascade

**N = Not present or No Impact will occur.**

**Y = Impacts may occur (explain under Potential Impacts).**

<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<p><b>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b> Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The proposed site lies on a heavily eroded bench overlooking Belt Creek which is approximately 500 feet to the south. This area is predominantly a glacial/alluvial deposit of Quaternary Age consisting of silt, sand, and gravel deposited by Glacial Lake Great Falls.</p> <p>The soils are of a cobbly clay loam texture and vary in depth from 6 inches to 12 inches. The soils would be salvaged prior to mining and evenly replaced following recontouring. There is no overburden to salvage.</p> <p>Microorganisms should reinvade the site.</p>
<p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION:</b> Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[Y] There are no water wells within the area. The depth to the groundwater table is estimated to be 100 feet plus below the elevation of the proposed operation. The site will be mined to a depth of 30 feet. There should be no impact to groundwater. The pit area will contain any stormwater run off.</p> <p>The applicant will berm and line any fuel and fuel storage areas to contain any petroleum-based products spills.</p>
<p><b>3. AIR QUALITY:</b> Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[N] There will be an increase in airborne particulates while the soil is being salvaged, the gravel being crushed and hauled, and soil replaced. The applicant will need to secure an Air Quality Permit from the Montana Dept. of Environmental Quality prior to crushing activities and must abide with all applicable air quality guidelines. Spray bars will be placed on the crusher to suppress dust. The hard stand areas, soil stockpiles, and haul roads will be watered as necessary.</p>

<p><b>4. VEGETATION COVER, QUANTITY AND QUALITY:</b> Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The site currently contains very sparse native grasses and forbs. The site will be seeded with native species of grasses. There are no threatened or endangered plants present.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b> Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] The condition of the proposed operation precludes the significant use of wildlife, although it would be expected to receive transient use by various avian species, deer and rodents.</p>
<p><b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b> Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] The Montana Natural Heritage Program has not identified any threatened or endangered plant or animal species present on this site, but eagles were identified as present on the Missouri River several miles from the proposed operation. There are no wetlands present on the site.</p>
<p><b>7. HISTORICAL AND ARCHAEOLOGICAL SITES:</b> Are any historical, archaeological or paleontological resources present?</p>	<p>[N] A Ground search by DEQ did not reveal the presence of any archaeological or historic values and the site has had a cultural resource survey done on it in the past. Should a significant archaeological or historical value be found, the operation will be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office will be promptly notified.</p>
<p><b>8. AESTHETICS:</b> Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N]</p>
<p><b>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:</b> Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N]</p>
<p><b>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:</b> Are there other studies, plans or projects on this tract?</p>	<p>[N] Zoning clearance has been obtained.</p>

**IMPACTS ON THE HUMAN POPULATION**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>11. HUMAN HEALTH AND SAFETY:</b> Will this project add to health and safety risks in the area?	<b>[Y]</b> The use of heavy mining and hauling equipment will increase the risk of accidents. However, the applicant must comply with OSHA and MSHA regulations and it is expected that safety considerations will be given the utmost attention.
<b>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:</b> Will the project add to or alter these activities?	<b>[N]</b>
<b>13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:</b> Will the project create, move or eliminate jobs? If so, estimated number.	<b>[N]</b>
<b>14. LOCAL AND STATE TAX BASE AND TAX REVENUES:</b> Will the project create or eliminate tax revenue?	<b>[N]</b>
<b>15. DEMAND FOR GOVERNMENT SERVICES:</b> Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	<b>[N]</b> The site will require periodic site evaluations by DEQ staff, however they would generally be conducted in conjunction with other regional sites.
<b>16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:</b> Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	<b>[N]</b> Zoning clearance has been secured from Cascade County.
<b>17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:</b> Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	<b>[N]</b>
<b>18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:</b> Will the project add to the population and require additional housing?	<b>[N]</b>

<b>19. SOCIAL STRUCTURES AND MORES:</b> Is some disruption of native or traditional lifestyles or communities possible?	[N]
<b>20. CULTURAL UNIQUENESS AND DIVERSITY:</b> Will the action cause a shift in some unique quality of the area?	[N]
<b>21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</b>	[N]

**22. Alternatives Considered:** Alternative # 1: Denial. The owner of the gravel resource would be denied full utilization of his property at this time.

**23. Public Involvement, Agencies, Groups or Individuals contacted:** Montana Natural Heritage Program; Cascade County Weed Board and Planning Office.

**24. Other Governmental Agencies with Jurisdiction, List of Permits Needed:** Cascade County for Zoning Compliance, DEQ for Air Quality Permit, & MSHA and OSHA for safety permits.

**25. Magnitude and Significance of Potential Impacts:** Not applicable. A finding of significance is relevant only to the requirement to prepare an EIS under MEPA. However, the statutory time constraints of the Opencut Mining Act preclude preparation of an EIS. Therefore, no such finding is necessary here.

**26. Regulatory Impact on Private Property:** The analysis conducted in response to the Private Property Assessment Act indicates no impact.

**Recommendation for Further Environmental Analysis:**

EIS       More Detailed EA       No Further Analysis

EA Checklist Prepared By: Jerry Burke  
Name

Mine Reclamation Specialist  
Title

Approved By: Steve Welch  
Name

Chief, Industrial & Energy Minerals Bureau  
Title

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Signature

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Date